

**Attachment F**  
**Data Quality Objective Summary**

**Sampling Objective:**

1. Determine presence & extent of contamination
2. Disposal profile and treatment option
3. Delineation of contaminant plume in ground water
4. Determine identification of contaminants
5. General physical/chemical properties of sources or contaminants
6. Determine background/control

**QA Deliverables for Definitive Data:**

1. Sample Documentation
2. Chain of custody
3. Sampling design approach
4. Initial and continuing calibration
5. Determination and documentation of detection limits.
6. ANALYTE(s) identification
7. ANALYTE(s) quantification
8. QC blanks(trip, method, Rinsate)
9. Matrix spike recoveries
10. PE samples(when specified)
11. Analytical error or total measurement error determination

**A. Remedial Unit: Ground water**

Required Data Quality Type: D

Parameter: BNA (Semivolatiles), VOA, Pesticides / PCBs, Cyanide, Metals

Matrix: Ground Water

Sampling Approach: Judgmental

Number of Samples: 18

Compositing Scheme: Grab

Sampling Design: The Sample ID, Sample Location, and Rationale, were provided by TNRCC.

Sample Container Type, Volume(number per location): 1 liter amber glass (2), & 40 ml. glass vial (2), 1 liter poly (2)

Sample Preservation: 4°C, HNO<sub>3</sub> for metals, NaOH for cyanide, HCL for VOA

Sample Holding Time: 7 days

Analytical Method/Instrument: E&E 12/95 SOW

Action Level:

Detection Limit: See SOW

Performance Requirements: See SOW

Number replicate aliquots for analytical error: 1

Number co-located samples for total error: 1

Number of Trip Blanks: 1

Number of Rancid Blanks: 1

Number of Field Blanks: 1

Number of PE Samples:

Number of Matrix Spikes: 1

## **B. Remedial Unit: Soil**

Required Data Quality Type: D

Parameter: BNA (Semivolatiles), VOA, Pesticides / PCBs, Cyanide, Metals

Matrix: Soil

Sampling Approach: Search (hot spots)

Number of Samples: 25

Compositing Scheme: Grab & Composite

Sampling Design: The Sample ID, Sample Location, and Rationale, were provided by TNRCC & the EPA.

Sample Container Type, Volume(number per location): 8 oz. glass jar (2), & 40 ml. glass vial (2)

Sample Preservation: 4°C

Sample Holding Time: 7 days

Analytical Method/Instrument: E&E 12/95 SOW

Action Level:

Detection Limit: See SOW

Performance Requirements: See SOW

Number replicate aliquots for analytical error: 1

Number co-located samples for total error: 2

Number of Trip Blanks:

Number of Rinsate Blanks:

Number of Field Blanks:

Number of PE Samples:

Number of Matrix Spikes: 1

## **C. Remedial Unit: Above-Ground Storage Tanks**

Required Data Quality Type: D

Parameter: Hazard Characterization, BNA (Semivolatiles), VOA, Pesticides / PCBs, Cyanide, Metals, BTU, RCRA characteristics, & % Water

Matrix: Oil/Sludge

Sampling Approach: Judgmental

Number of Samples: To be determined in the field, but it will be assumed that 60-90 samples to be collected for hazard characterization, 10 of which will be sent for definitive analysis.

Compositing Scheme: Grab

Sampling Design: The AST will be checked to determine the phases of its contents via the oil/water interface probe. Collect one sample from each phase. Perform Hazardous Categorization on all collected samples. Separate samples according to their waste streams. Submit the waste streams for analyzes.

Sample Container Type, Volume(number per location): 8 oz. glass jar (2), & 40 ml. glass vial (2)

Sample Preservation: 4°C

Sample Holding Time: 7 days

Analytical Method/Instrument: E&E 12/95 SOW

Action Level:

Detection Limit: See SOW

Performance Requirements: See SOW

Number replicate aliquots for analytical error: 1

Number co-located samples for total error: 1

Number of Trip Blanks:

Number of Rinsate Blanks:

Number of Field Blanks:

Number of PE Samples:

Number of Matrix Spikes: 1

#### **D. Remedial Unit: Insulated Piping**

**Required Data Quality Type: D**

**Parameter: Asbestos**

**Matrix: Fibrous Material**

**Sampling Approach: Search (hot spots)**

**Number of Samples: To be determined in the field, but it will be assumed that 20 samples to be collected**

**Compositing Scheme: Grab**

**Sampling Design: Screen any suspected fibrous material for asbestos contents, then ship for analysis to laboratory**

**Sample Container Type, Volume(number per location):**

**Sample Preservation: N/A**

**Sample Holding Time: N/A**

**Analytical Method/Instrument:**

**Action Level:**

**Detection Limit:**

**Performance Requirements:**

**Number replicate aliquots for analytical error:**

**Number co-located samples for total error: 2**

**Number of Trip Blanks:**

**Number of Rinse Blanks:**

**Number of Field Blanks:**

**Number of PE Samples:**

**Number of Matrix Spikes:**